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| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b> |  | ATTORNEY'S DOCKET NUMBER<br>04634/0202652-USO<br>U.S. APPLICATION NO. (if known, see 37 CFR 1.5)<br><b>10/528381</b> |
| INTERNATIONAL APPLICATION NO.<br>PCT/IB2003/004186  | INTERNATIONAL FILING DATE<br>15 September 2003 | PRIORITY DATE CLAIMED<br>17 September 2002   |
| TITLE OF INVENTION    INTRODUCTION OF MICROORGANISMS IN BIO-ASSISTED HEAP LEACHING OPERATIONS   |  |  |
| APPLICANT(S) FOR DO/EO/US    Frank K. Crundwell et al.  |  |  |

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☒ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
18. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: Certificate of Express Mailing; International Preliminary Examination Report and amended sheets; Return receipt postcard

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                                     |   |              |  |                     |
|--|-------------------------------------|---|--------------|--|---------------------|
| U.S. APPLICATION NO. <b>10/528381</b>  |                                     | INTERNATIONAL APPLICATION NO.<br><b>PCT/IB2003/004186</b>                     |              | ATTORNEY'S DOCKET NUMBER<br><b>04634/0202652-US0</b> |                     |
| The following fees have been submitted   |                                     |   |              | <b>CALCULATIONS</b>                                  | <b>PTO USE ONLY</b> |
| 21.  | <input checked="" type="checkbox"/> | Basic national fee .....  | <b>\$300</b> | \$ 300.00  |                     |
| 22.  | <input type="checkbox"/>            | Examination fee   |              |  |                     |
| If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4).....  |                                     |   |              | <b>\$100</b>   |                     |
| All other situations .....   |                                     |   |              | <b>\$200</b>   |                     |
| 23.  | <input type="checkbox"/>            | Search fee  |              |  |                     |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....  |                                     |   |              | <b>\$100</b>   |                     |
| International Search Report prepared and provided to the Office .....  |                                     |   |              | <b>\$400</b>   |                     |
| All other situations .....   |                                     |   |              | <b>\$500</b>   |                     |
| <b>TOTAL OF 21, 22 and 23 =</b>  |                                     |   |              | <b>\$ 300.00</b>                                     |                     |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.   |                                     |   |              |  |                     |
| Total Sheets   | Extra sheets                        | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE         |  |                     |
| 14 - 100 =   | /50 =                               |   | x \$250.00   |  |                     |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).  |                                     |   |              | \$   |                     |
| CLAIMS   | NUMBER FILED                        | NUMBER EXTRA  | RATE         |  |                     |
| Total claims   | - 20 =                              |   | x            | \$   |                     |
| Independent claims   | - 3 =                               |   | x            | \$   |                     |
| MULTIPLE DEPENDENT CLAIM(s) (if applicable)  |                                     |   |              | \$   |                     |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |                                     |   |              | <b>\$ 300.00</b>                                     |                     |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.   |                                     |   |              |  |                     |
| <b>SUBTOTAL =</b>  |                                     |   |              | <b>\$ 300.00</b>                                     |                     |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).   |                                     |   |              | \$   |                     |
| <b>TOTAL NATIONAL FEE =</b>  |                                     |   |              | <b>\$ 300.00</b>                                     |                     |
| Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  |                                     |   |              | \$   |                     |
| <b>TOTAL FEES ENCLOSED =</b>   |                                     |   |              | <b>\$ 300.00</b>                                     |                     |
|  |                                     |   |              | Amount to be refunded:                               | \$                  |
|  |                                     |   |              | Amount to be charged:                                | \$                  |
| a. <input checked="" type="checkbox"/> A check in the amount of \$ 300.00 to cover the above fees is enclosed.<br>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.<br>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 04-0100. A duplicate copy of this sheet is enclosed.<br>d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. |                                     |   |              |  |                     |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the International Application to pending status.  |                                     |   |              |  |                     |
| SEND ALL CORRESPONDENCE TO:  |                                     |   |              |  |                     |
| S. Peter Ludwig<br>DARBY & DARBY P.C.<br>P.O. Box 5257<br>New York, New York 10150-5257<br>(212) 527-7770<br>CUSTOMER NUMBER: 07278  |                                     |   |              |  |                     |
|  |                                     |   |              | SIGNATURE:   | S. Peter Ludwig     |
|  |                                     |   |              | NAME   |                     |
|  |                                     |   |              | 25,351   |                     |
|  |                                     |   |              | REGISTRATION NUMBER                                  |                     |

107528381

JC05 Rec'd PCT/PTO 17 MAR 2005

Application No. (if known): Not Yet Assigned

Attorney Docket No.: ( 34/0202652-US0

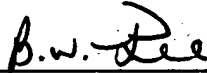
**Certificate of Express Mailing Under 37 CFR 1.10**

I hereby certify that this correspondence is being deposited with the United States Postal Service as  
Express Mail, Airbill No. in an envelope addressed to:

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Transmittal Letter to the United States Designated-Elected Office (2pp)  
Information Disclosure Statement (4pp)  
PTO/SB/08a with two documents  
International Search Report  
First Preliminary Amendment (6pp)  
Application Data Sheet (3pp)  
Check in the amount of \$300.00 **ck# 7980**  
International Preliminary Examination Report with amended sheets.  
Return receipt postcard